

REMARKS

Claims 1-27 were previously pending in this application. Claims 15, 19-21, and 23 have been amended. As a result claims 1-27 are pending for examination with claims 1, 15, 21, and 23 being independent claims. No new matter has been added.

Rejections Under 35 U.S.C. §103

The Office Action rejected claims 1-12 and 15-27 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,092,178 issued to Anita Jindal, et al, (hereinafter “Jindal”) in further view of U.S. Patent Application No. 2005/0149531 issued to Sunil K. Srivastava, (hereinafter “Srivastava”). Applicant has amended claims 15, 21, and 23 to further describe and clarify the invention, and in response, Applicant respectfully traverses the rejection and submits the following remarks.

Independent Claim 1

Jindal is directed to a system for responding to a resource request that employs a trigger in association with a network naming service, such as DNS (Domain Name Service), that handles client requests for an application. (Abstract). The trigger comprises a set of executable instructions referenced by a resource record associated with an identifier of the application. (Abstract). In response to a client request concerning the application, the resource record is retrieved and the instructions executed. (Abstract). In one embodiment, information (response time, operational status, number of clients connected to the instance, throughput, status or performance of the servers themselves) is stored on the DNS server or a system that is coupled to the DNS server. (Col. 6, lines 60-62; lines 45-54). Identities of one or more of the preferred servers may also be stored. Thus a trigger, when executed in response to a client request, may retrieve the identity of a pre-selected preferred server or select a preferred server based on the collected information and/or criteria provided in the client request. (Col. 6, lines 62-67). In one embodiment, the information is collected by a load-balancing framework, consisting of multiple executable objects, modules or other collection of executable instructions. (Col 3, lines 61-63). Each instance of an application is thus associated with its own status object(s) and monitor objects that collect and store information. (please see Col 3, lines 66-67 and Col. 4 lines 1-12).

In summary, Jindal discloses a system for responding to a resource request that performs load-balancing by employing triggers, the triggers either select a predefined preferred server or

the triggers perform analysis based on stored data to select a preferred server hosting an application instance. Thus, in response to a request from a client for a service, Jindal performs a load-balancing analysis and then connects the client to a “preferred server.”

By contrast, claim 1 recites a method of providing a service to a client from one of a plurality of servers, each of the servers being capable of providing the service to the client and each of the servers being associated with a service address common to all of the servers. The method comprises the steps of receiving a request for the service from the client, the request specifying the common service address, in response to the request, connecting the client to one of the plurality of servers, receiving, at the client, information identifying each of the plurality of servers from the server to which the client is connected, and selecting, at the client, one of the plurality of servers as the server to be used to provide the service to the client.

The Office Action alleges that Jindal discloses all of the elements of the claim 1, except that “Jindal did not explicitly disclose wherein the receiving of information identifying each of a plurality of servers from the server to which the client is connected and selecting one of the plurality of servers to be used to provide the service to the client occurs at the client.” (Office Action, p. 3 [emphasis in original]). Applicant respectfully disagrees with the Examiner’s interpretation of Jindal as discussed in more detail below.

Jindal fails to teach or suggest the steps of “receiving, at the client, information identifying each of the plurality of servers from the server to which the client is connected, and selecting, at the client, one of the plurality of servers as the server to be used to provide the service to the client,” as recited in claim 1. As disclosed in Jindal, once a client connection is made to the server capable of providing the service, no further load-balancing operations, connections, or information for selecting is passed between any computer. Therefore, Jindal does not teach or suggest the steps of “receiving, at the client, information identifying each of the plurality of servers from the server to which the client is connected, and selecting, at the client, one of the plurality of servers as the server to be used to provide the service to the client,” as recited in claim 1.

The Applicant respectfully submits that the teachings of Jindal do not encompass the elements of claim 1, except for “wherein the receiving of information identifying each of a plurality of servers from the server to which the client is connected and selecting one of the plurality of servers to be used to provide the service to the client occurs at the client,” as alleged in the Office Action. Rather, Jindal teaches a system where a load balancing decision occurs at

the DNS server, which identifies a preferred server to which a client will connect. Once the client is connected, no further operations are performed. The Applicant respectfully submits that Jindal does not teach the limitations of claim 1, except for their occurrence at the client, as alleged in the Office Action.

Further, Srivastava does not supply the missing limitations of claim 1. Srivastava is directed to an apparatus and a method for the rapid routing of data to a load-balanced server by employing label values to define a forwarding route, enabling nodes to fast-switch packets based on label mappings. (Abstract). The first server response packet is switched hop-by-hop, and the label is stored at each node traversed by the response packets. (Abstract). For other request and response packets, nodes fast-switch the packets based on the label mappings, thus packet flows are rapidly routed from the client to the same server without time-consuming hop-by-hop routing or repeated load balancing decisions. (Abstract). Although Srivastava recites that a client can look up using DNS, available servers for a particular protocol (para. 5, lines 8-11), it is not taught or suggested that the client may do so at one of the plurality of servers capable of providing that service. The invention disclosed in Srivastava does not describe a method or apparatus that allows the client to make any selection, rather it teaches that after selections are made at load balancing nodes, label records provide a mapping to fast switch packets. (please see Abstract and para. 0030). The background of Srivastava suggests that a client may perform lookups at the DNS server but does not teach or suggest a lookup could occur at the one of the plurality of servers capable of providing the service, therefore the combination of Jindal and Srivastava (assuming, without admitting, that the combination was proper and feasible) would not render obvious that which is recited in claim 1.

In addition, the Applicant respectfully disagrees with the Examiner's alternative interpretation that the "server to which the client is connected" can be read as not the "preferred server" of Jindal, but the "DNS server 100." (please see Office Action, p. 3 first para.). Claim 1 recites "selecting, at the client, one of the plurality of servers as the server to be used to provide the service to the client." Thus, the selected server is the server used to provide the service to the client. The Applicant respectfully submits the DNS server of Jindal is not the server that provides the service to the client. Rather the DNS server of Jindal merely provides name service lookup, not the service that is being accessed by the client. Even if one were to assume the DNS server of Jindal were capable of providing some form of service, only one DNS server is

disclosed, and even if a plurality of DNS servers were disclosed, one skilled in the art would appreciate that they could not have a “common service address,” as recited in claim 1.

Moreover, the Applicant respectfully submits the combination suggested by the Examiner is the result of improper hindsight analysis of Jindal and Srivastava in light of the teachings of the present invention. Jindal is directed to a load-balancing system that employs executable triggers to perform load-balancing decisions. Srivastava is directed to a load-balancing system that records the results of a series of load-balancing decisions in response to a client request as labels, employing the labels to fast switch subsequent requests. Neither reference presents a deficiency that would lead one skilled in the art to combine the references, therefore the conclusion that one skilled in the art would be motivated to combine the references cannot be reached, and is hindsight in view of the Applicants’ disclosure, which is improper.

Accordingly, withdrawal of this rejection is respectfully requested. Claims 2-14 depend from claim 1 and are allowable for at least the same reasons as the independent claim from which they depend.

Independent Claim 15

Claim 15, as amended, recites a client for use in a client-server system. The client being arranged to request a service, the request specifying a service address common to all of a plurality of servers, each of the plurality of servers being capable of providing the service to the client, connect to one of the plurality of servers, receive information from the server to which the client is connected, said information identifying each of the plurality of servers, and select one of the plurality of servers as the server to be used to provide the service to the client.

The Applicant respectfully submits that Jindal does not disclose the elements of claim 15, as alleged in the Office Action. In particular Jindal does not teach or suggest a client arranged to “receive information from the server to which the client is connected, said information identifying each of the plurality of servers, and select one of the plurality of servers as the server to be used to provide the service to the client,” as recited in claim 15, as amended. As discussed above with respect to claim 1, the client in Jindal does not connect to the server that is capable of providing the service until after the load-balancing decision disclosed in Jindal has been made. As discussed above, in Jindal, once a client connection is made to the server capable of providing the service no further operations are performed. Thus, Jindal does not teach or suggest a client

that receives information from a server to which the client is connected identifying each of a plurality of servers, as Jindal does not perform additional steps after the connection is made.

Srivastava fails to supply the missing limitations of claim 15, as alleged in the Office Action. As discussed above with respect to claim 1, Srivastava does not describe a method or apparatus that allows the client to make any selection. Rather, Srivastava teaches that after selections are made at load balancing nodes, label records provide a mapping to fast switch packets. (please see Abstract and para. 0030). Although the background of Srivastava suggests that a client may perform a lookup at the DNS server, the background does not teach or suggest that a client may perform a lookup at one of the plurality of servers capable of providing the service. Therefore, the combination of Jindal and Srivastava (assuming, without admitting, that the combination of references was proper and feasible) would not render obvious that which is recited in claim 15.

As discussed with respect to claim 1, there is no deficiency that would lead one skilled in the art to combine the references, therefore the conclusion that one skilled in the art would be motivated to combined the references cannot be reached, and is hindsight in view of the Applicants' disclosure, which is improper.

The Applicant respectfully requests that the rejection be withdrawn. Claims 16-20 depend from claim 15 and are allowable for at least the same reasons as the independent claim from which they depend.

Independent Claim 21

Independent claim 21, as amended, recites a server for use in a client-server system having a plurality of servers, each of the servers being capable of providing a service to the client and each of the servers being associated with a service address common to all of the servers. The server being arranged to receive information relating to each of the plurality of servers, connect to the client in response to a request from the client for the service, the request specifying the common service address, send information to the client, the information identifying each of the plurality of servers to the client, and connect to the client in response to a selection, at the client, of one of the plurality of servers as the server to be used to provide the service to the client.

The Applicant respectfully submits that Jindal does not disclose the elements of claim 21 as alleged in the Office Action. In particular, Jindal does not teach or suggest a server being

arranged to “send information to the client, the information identifying each of the plurality of servers to the client, and connect to the client in response to a selection, at the client, of one of the plurality of servers as the server to be used to provide the service to the client,” as recited in claim 21, as amended. As discussed above with respect to claim 1, the client in Jindal does not connect to the server that is capable of providing the service until after the load-balancing decision disclosed in Jindal has been made. As discussed above in Jindal, once a client connection is made to the server capable of providing the service no further operations are performed. Thus, Jindal does not teach or suggest a server that sends information to the client, the information identifying each of the plurality of servers to the client, and connects to the client in response to a selection, at the client, of one of the plurality of servers as the server to be used to provide the service to the client, as Jindal does not perform additional steps after the connection is made.

Further, Srivastava fails to supply the missing limitations of claim 21, as amended. As discussed above with respect to claim 1, the Srivastava does not describe a method or apparatus that allows the client to make any selection. Rather, Srivastava teaches that after selections are made at load balancing nodes, label records provide a mapping to fast switch packets. (please see Abstract and para. 0030). Although the background of Srivastava suggests that a client may perform a lookup at the DNS server, it does not teach or suggest that a client may perform a lookup at one of the plurality of servers capable of providing the service. Therefore, the combination of Jindal and Srivastava (assuming, without admitting, that the combination was proper and feasible) would not render obvious that which is recited in claim 21.

In summary, as discussed with reference to independent claim 1, the combination of Jindal and Srivastava is improper. Further, even if combined, the combination does not render obvious that which is recited in claim 21. Therefore, the combination of references is first improper, and second, the combination does not teach or suggest that which is recited in independent claim 21. Claim 22 depends from claim 21 and is allowable for at least the same reasons as the independent claim from which it depends.

Independent Claim 23

Independent Claim 23, as amended, recites a client-server system having a plurality of servers, each of the servers being capable of providing a service to the client and each of the servers being associated with a service address common to all of the servers. The system being

arranged to communicate information between the servers so that each of the plurality of servers maintains information relating to all of the servers, receive a request for the service from the client, the request specifying the common service address, connect the client to one of the plurality of servers in response to the request, send server information to the client from the server to which the client is connected, said server information identifying each of the plurality of servers to the client, and select, at the client, one of the plurality of servers as the server to be used to provide the service to the client.

The Applicant respectfully submits that Jindal does not disclose the elements of claim 23, as alleged in the Office Action. In particular, Jindal does not teach or suggest a system being arranged to “send server information to the client from the server to which the client is connected, said server information identifying each of the plurality of servers to the client, and select, at the client, one of the plurality of servers as the server to be used to provide the service to the client,” as recited in claim 23, as amended. As discussed above with respect to claim 1, the client in Jindal does not connect to the server that is capable of providing the service until after the load-balancing decision disclosed in Jindal has been made. As discussed above, once a client connection is made to the server capable of providing the service no further operations are performed. Thus, Jindal does not teach or suggest a system being arranged to send server information to the client from the server to which the client is connected, said server information identifying each of the plurality of servers to the client, and select, at the client, one of the plurality of servers as the server to be used to provide the service to the client, as Jindal does not perform additional steps after the connection is made.

Further, Srivastava fails to supply the missing limitations of amended claim 23. As discussed above with respect to claim 1, Srivastava does not describe a method or apparatus that allows the client to make any selection. Rather, Srivastava teaches that after selections are made at load balancing nodes, label records provide a mapping to fast switch packets. (please see Abstract and para. 0030). Although the background of Srivastava suggests that a client may perform a lookup at the DNS server, the background does not teach or suggest that a client may perform a lookup at one of the plurality of servers capable of providing the service. Therefore, the combination of Jindal and Srivastava (assuming, without admitting, that the combination of these references was proper and feasible) would not render obvious that which is recited in claim 23.

In summary, as discussed above with reference to independent claim 1, the combination of Jindal and Srivastava is improper. Further, even if combined, the combination does not render obvious that which is recited in independent claim 23. Therefore, the combination of references is first improper, and second, the combination does not teach or suggest that which is recited in independent claim 23. Claims 24-27 depend from claim 23 and are allowable for at least the same reasons as the independent claim from which they depend.

Dependent Claims 13-14

The Office Action rejected claims 13-14 under 35 U.S.C. §103(a) as being unpatentable over “Jindal” in view of “Srivastava” and further in view of U.S. Patent Application No. 2003/0149653 issued to Neill Penney, (hereinafter “Penney”).

As discussed with respect to independent claim 1 from which claim 13 and 14 depend, first, the combination of Jindal and Srivastava is improper, and second the combination does not teach or suggest that which is recited in independent claim 1. Claims 13 and 14 depend from claim 1 and are allowable for at least the reasons discussed above with respect to independent claim 1. Further, Penny does not supply the missing limitations discussed above with respect to claim 1.

Penny is directed to a method and apparatus for conducting financial transactions that enables a user to negotiate with multiple customers simultaneously, and receive and respond to transaction solicitations and amend requests in real time. (Abstract). Applicant notes that one skilled in the art would not seek to combine the load-balancing systems of Jindal and Srivastava with financial transaction manager of Penny. Thus, one skilled in the art would not be motivated to combine the references as suggested by the Examiner. Therefore, the conclusion that a client would be granted a second chance to connect to the desired server resulting in greater client satisfaction cannot be reached and is improper hindsight in light of the Applicant's disclosure.

As discussed with respect to independent claim 1 from which 13 and 14 depend, the combination is improper, and even if combined do not teach that which is recited in independent claim 1. If Jindal/Srivastava were combined, there is no motivation to further modify the Jindal/Srivastava combination with the teachings of Penny. One skilled in the art would not seek to modify the load-balancing system of Jindal/Srivastava with the financial transaction manager of Penny. Further, even if the references were combined as suggested by the Examiner, the combination does not render obvious that which is recited in independent claim 1. In particular,


none of the references teach or suggest “receiving, at the client, information identifying each of the plurality of servers from the server to which the client is connected, and selecting, at the client, one of the plurality of servers as the server to be used to provide the service to the client,” as recited in claim 1. Penny employs “conventional technology” for receiving and responding to solicitations to conduct or amend financial transactions. (Page 3, para. [0026]). In one embodiment, Penny employs a client/server model and HTTP, “as is known in the art.” (Page 8, para, [0118]). Thus, Penny employs conventional technology that does not teach or suggest the steps of “receiving, at the client, information identifying each of the plurality of servers from the server to which the client is connected, and selecting, at the client, one of the plurality of servers as the server to be used to provide the service to the client,” as recited in claim 1. Therefore, the combination is first, improper, and second, the combination does not teach or suggest that which is recited in independent claim 1. Claims 13 and 14 depend from claim 1 and are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, reconsideration is respectfully requested. This application should now be in condition for allowance; a notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50/2762.

Respectfully submitted,
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